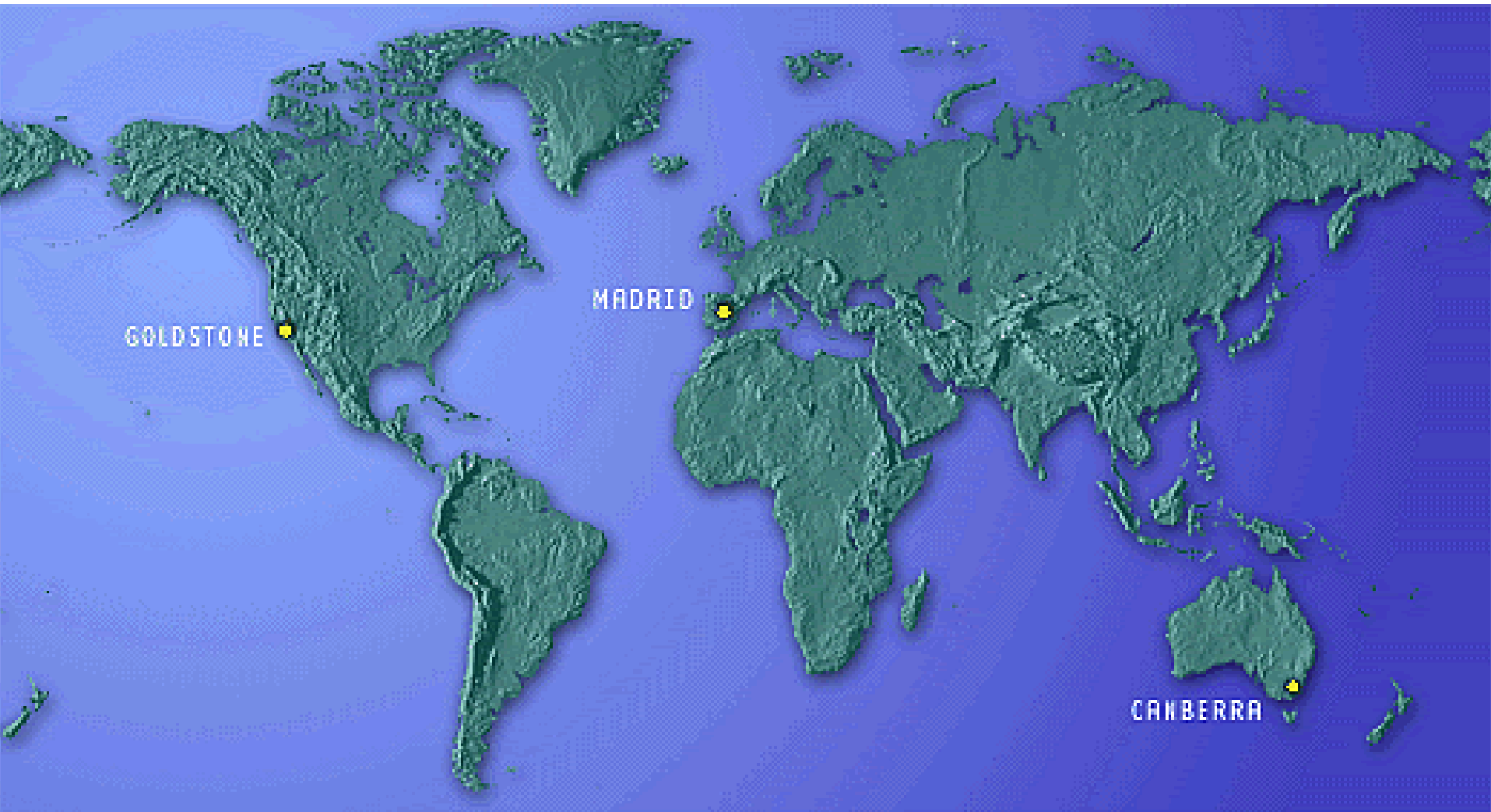


# DSN Antenna Downtime Status and Forecast



<http://rapweb.jpl.nasa.gov/planning>

# Antenna Downtime Status and Forecast

## The following downtimes for 2008.

- ❑ SPC-60 additional time for Commercial Power Installation has been performed.
  - ❑ DOYs 203, 204, 205 & 206 have been scheduled, DOYs 203 and 204 were extended at the request of the complex.
  - ❑ Will any more time be required?
- ❑ SPC-40 is requesting complex downtime for A Station Power Grid.
  - ❑ Week 35 DOY 238 2200-0600 scheduled
  - ❑ Week 38 DOY 266 2200-0400 scheduled
  - ❑ Week 40 DOY 273 2200-0400 scheduled
- ❑ DSS-34 Ka-Band Phase 2 downtime beginning in week 29 has scheduled an additional 4 weeks to complete the task and will end in week 43.
  - ❑ Engineering Demos have been scheduled starting in week 39 (22 September)
  - ❑ Cassini has requested a non-committed support in week 42.
- ❑ DSS-55 downtime for Paint Repair is scheduled for September, weeks 36 - 41.
  - ❑ Weeks 39-41 the antenna is available from 1800-0800.
- ❑ DSS-14 Grouting has been proposed for 5 days during the October time frame.
  - ❑ This grouting period has been suggested to run in parallel with the DSS-24 downtime for Ka-Band Phase 2 in weeks 46 & 47, which would leave only 2 S-Band antenna available to the projects. The suggestion is to have the downtime completed prior to the DSS-24 downtime, but not to impact the MSGR flyby.
  - ❑ This needs additional discussion.
- ❑ DSS-54 downtime for ACQ Aid Installation is scheduled for October, weeks 42 and 43 of 2008.
  - ❑ Due to Cassini critical support, the proposed downtime DOYs will be 287 – 290 and 295 – 298. The NOPE will schedule TERRA supports for testing.
- ❑ DSS-24 Ka-Band Phase 2 downtime has been moved from 2009 to start in week 45 of 2008 through week 3 of 2009.

# Antenna Downtime Status and Forecast

## Downtime request for 2008

**The following proposals for 14 hour complex downtimes are requested by GDSCC.**

- ❑ Requesting 60 eight hour daylight time for DSS-14 Fall Arrest Downtime.
  - ❑ Proposing to schedule this downtime during DSS-14 Grouting in week 31 and Life Extension scheduled for 2009.
- ❑ Corrective maintenance “G86/G81 Transfer Switch Electrical Maintenance”
  - ❑ Has been moved to start NET week 4 of 2009.
- ❑ Preventative maintenance “G91 2400V Switchgear Electrical Maintenance”
  - ❑ Has been scheduled for October 1, 2008, 1730-0330.
- ❑ Preventative maintenance “Echo Tie-Line Electrical Maintenance” has been moved to start after the Apollo Tie-Line Electrical Maintenance.
  - ❑ This can be moved to early CY 2009, proposed for week 7
- ❑ Preventative maintenance “Apollo Tie-Line Electrical Maintenance”
  - ❑ Has been proposed for week 45 DOY 311/1945-0345.
- ❑ Preventative maintenance “SPC-10 Electrical Maintenance”
  - ❑ Has been deleted from the request.

**Additional time is being requested** – these request have been postponed the NET 2009, week 26.

- ❑ Two 8 hour complex downtimes in December 2008 for cutover, final connection and testing of the new G86 Substation, Mars Site.
- ❑ Fourteen 4 hour periods between July 2009 and January 2010 for testing of G86 Substation, Mars Site.

# Antenna Downtime Status and Forecast

The following proposals for antenna downtimes are requested.

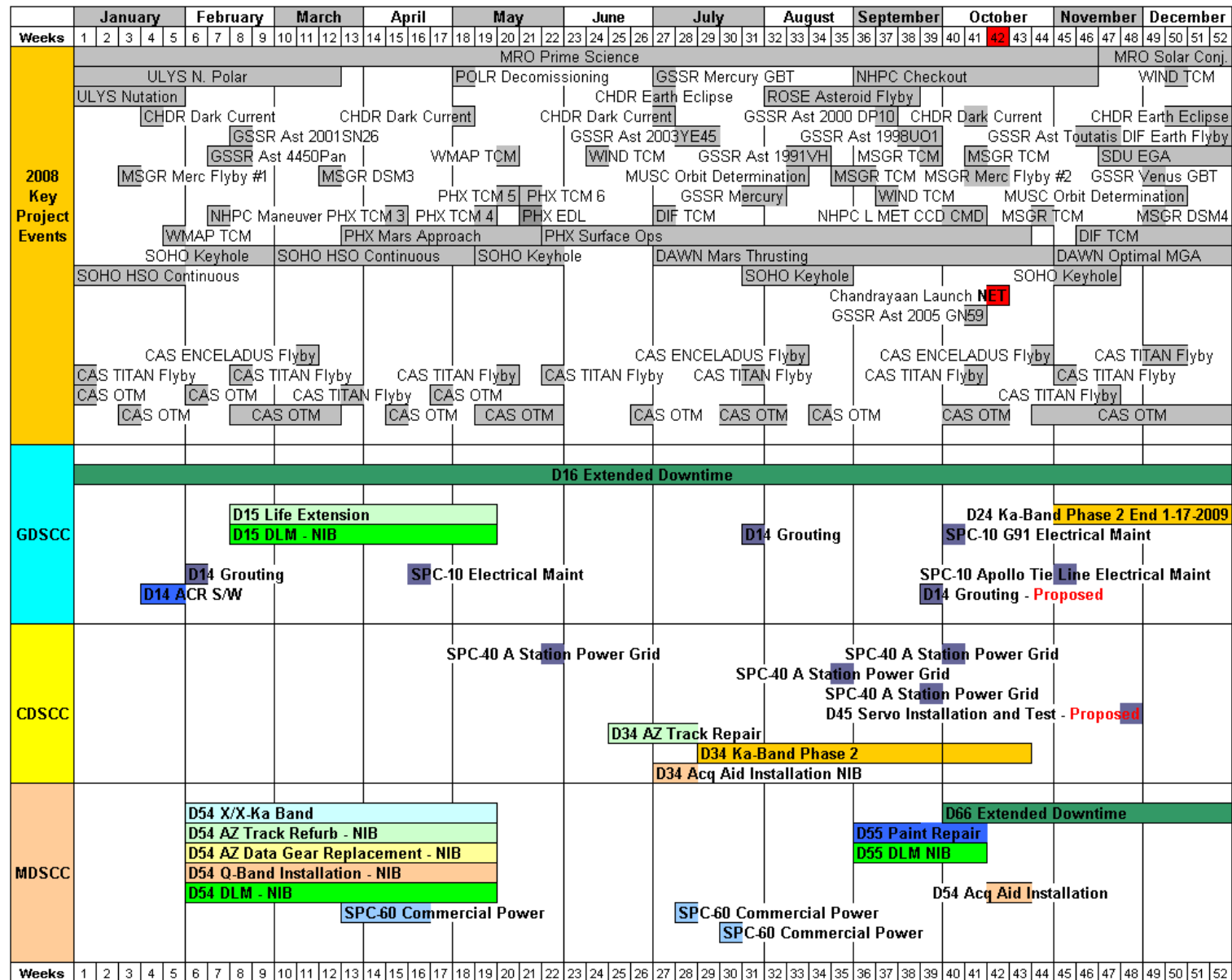
- ❑ **MDSCC Annual Antenna Inspections at DSS-54 and -55, -63, -65, as follows:**
  - ❑ DSS-54 is scheduled for DOY 305/0700-1500 week 44
  - ❑ DSS-55 is scheduled for DOY 294/0700-1500 week 43
  - ❑ DSS-63 is scheduled for DOY 296/0600-1400 week 43
  - ❑ DSS-65 is scheduled for DOY 295/0600-1400 week 43
  
- ❑ **HEF Transmitter Manifold Installation at DSS-15, -45 and -65 between July, 2008 and June 2009 not to be scheduled concurrently with DSS-15 being scheduled first. This is a 4 day downtime period.**
  - ❑ This installation has been put on hold.
  
- ❑ **Request 7 consecutive days for HEF Servo – Installation and test of Rev D board either at DSS-15 or DSS-45.**
  - ❑ Put on hold at this time, but can be scheduled after the DSS-24 Ka-Band Phase 2 and as late as September 2009
  - ❑ Possible to schedule DSS-45 in October – December time frame. Suggest week 48 of 2008.
  
- ❑ **Request to add a 20kW Transmitter Upgrade NIB to DSS-14 Bearing Regrout in mid October.**
  - ❑ If the regrout is canceled, need a 5-day period between mid-October and mid December.
  
- ❑ **DSS-15 Elevation Gearbox Replacement pending.**
  - ❑ Need 14 consecutive days for gearbox replacement, servo tuning, testing and performance verification. Dates not yet confirmed.

# Antenna Downtime Status and Forecast

## The following downtimes are for 2009 – 2010

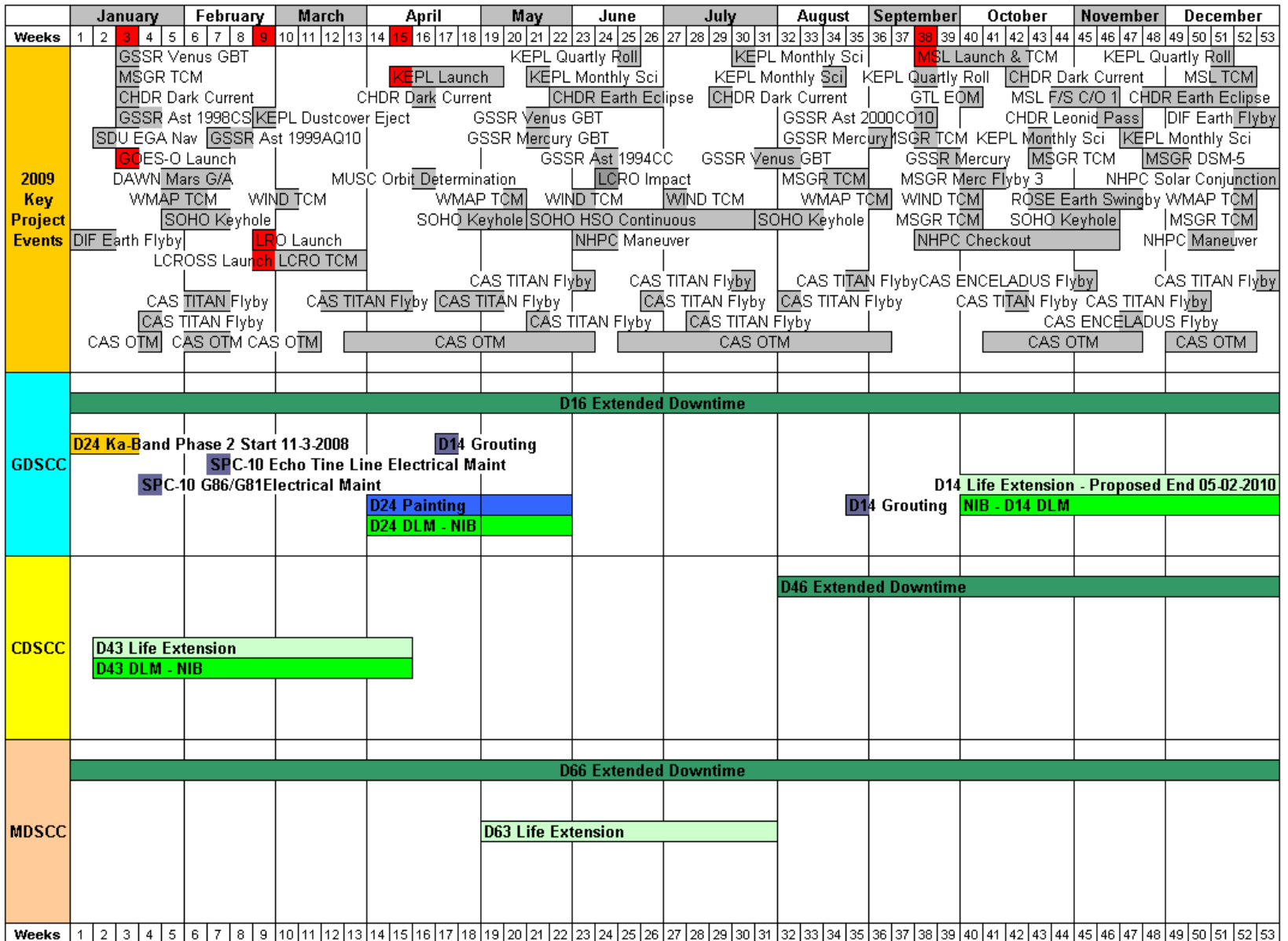
- ❑ DSS-43 downtime for Life Extension and Depot Level Maintenance will start January 5, 2009 and end April 12, 2009 weeks 2 – 15
- ❑ DSS-63 downtime for Life Extension has been shortened to May 4, through August 2, 2009, weeks 19 - 31.
- ❑ DSS-24 downtime for painting has been scheduled for April – May of 2009, weeks 14 - 22.
  - ❑ There will be complete 24/7 downtime for weeks 14-16 and dayshift downtime (1400-0200) for weeks 17-22.
  - ❑ Depot Level Maintenance will be scheduled during this downtime.
  - ❑ **Kepler launch date has moved to NET April 10, 2009**
- ❑ DSS-34 downtime for Azimuth Track Replacement has been proposed for 2010, local summer.
  - ❑ It is proposed to move to January 2010.
- ❑ DSS-65 downtime for Life Extension Elevation has been proposed for weeks 31 - 41 in 2010.
- ❑ As a result of the reduction of downtime for DSS-43 & DSS-63 in 2008 & 2009, it is requested to recover that time in 2010, local spring, summer or fall after DSS-14 RTS.
  - ❑ DSS-43 is proposed for August 30 to November 29, 2010 weeks 35-48
  - ❑ DSS-63 is proposed for February 28 to May 29, 2011 weeks 9 -21.
- ❑ DSS-15 downtime for Pintle Bearing has been proposed for May 3, through June 27, 2010, weeks 18 - 25.

# Antenna Downtime Status and Forecast 2008



Revised: August 4, 2008

# Antenna Downtime Status and Forecast 2009



Revised: August 4, 2008

# Antenna Downtime Status and Forecast 2010

	January				February				March				April				May				June				July				August				September				October				November				December																														
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52																							
2010 Key Project Events	GSSR Mars								WIND TCM				VCO Launch								GSSR Venus GBT				GSSR Venus GBT				GSSR Ast 1998U01				GSSR Mercury																																										
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GDSCC	D16 Extended Downtime																																																																										
	D14 Life Extension - Start 10.03.2009																	Proposed Extension																																																									
	NIB - D14 DLM																	Proposed Extension																	D25 Ka U/L																																								
																		D15 Pintle Bearing - Proposed																	NIB - D25 DLM																																								
CDSCC	D46 Extended Downtime																																																																										
	D34 AZ Track Replacement - Proposed																																																																										
	D34 M1.5 Mirror Alignment NIB - Proposed																																		D43 70m Power and HBA Upgrades - Proposed																																								
	D34 M5 Support Ring Replacement NIB - Proposed																																																																										
MDSCC	D66 Extended Downtime																																																																										
																																								D54 Ka-Band Phase 2 - Proposed																																			
																																				D65 Life Extension Elevation - Proposed																																							
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52																							

Revised: August 4, 2008



# Antenna Downtime Status and Forecast 2011

	January				February				March				April				May				June				July				August				September				October				November				December																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Revised: August 4, 2008

# Antenna Downtime Status and Forecast

## DSN Resource Implementation Planning Matrix by Subnet

Complex	Station	Subnet	S-Band		X-Band		Ka-Band		Ka Phase 2
			Down	Up	Down	Up	Down	Up	
40	DSS-46	26M*	✓	✓	N/A	N/A	N/A	N/A	N/A
60	DSS-66	26M*	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-27	34HSB	✓	✓	N/A	N/A	N/A	N/A	N/A
10	DSS-24	34B1	✓	✓	✓	✓	N/A	N/A	01/18/09
40	DSS-34	34B1	✓	✓	✓	✓	✓	N/A	10/25/08
60	DSS-54	34B1	✓	✓	✓	✓	04/15/08	N/A	12/31/10
10	DSS-25	34B2	N/A	N/A	✓	✓	✓	08/01/10	N/A
10	DSS-26	34B2	N/A	N/A	✓	✓	✓	N/A	N/A
60	DSS-55	34B2	N/A	N/A	✓	✓	✓	N/A	N/A
10	DSS-15	34HEF	✓	N/A	✓	✓	N/A	N/A	N/A
40	DSS-45	34HEF	✓	07/31/08	✓	✓	N/A	N/A	N/A
60	DSS-65	34HEF	✓	07/31/08	✓	✓	N/A	N/A	N/A
10	DSS-14	70M	✓	✓	✓	✓	N/A	N/A	N/A
40	DSS-43	70M	✓	✓	✓	✓	N/A	N/A	N/A
60	DSS-63	70M	✓	✓	✓	✓	N/A	N/A	N/A
N/A = Capability Not Planned      xx/xx/xx = Capability Date Recently Changed      As of: 07/22/08 ✓ ✓ ✓ = Capability Recently Exists      ✓ = Capability Exists      * = To Be Decommissioned									